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EXAMINER	
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ART UNIT	**PAPER NUMBER**
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/713,298
Filing Date: November 14, 2003
Appellant(s): OTIS ET AL.

Charles W. Griggers
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed October 12, 2007 appealing from the Office action mailed June 12, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

DE 4138468 A1, Foundation for Laser Technologies in Medicine at the University of Ulm, publication date June 03, 1993.

WO 03028943 A1, Method and Apparatus for Fine Liquid Spray Assisted Laser Material Processing, publication date April 10, 2003.

2003/0062126 A1	Scaggs	04-2003
2004/0197433 A1	Terada et al	10-2004

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9, 10, and 12-16 are rejected under 35 U.S.C. 102(b) as being anticipated by DE4138468. DE4138468 discloses a laser apparatus comprising a nozzle array which impinges liquid on the work. The positon of the nozzles is such that fluid can impinge on separated elongated features of a work piece depending on nozzle spacing with respect to a workpiece. Note, the intended use of the apparatus for particular work pieces does not impart patentability to the claims. Further, depending on some particular selection, the instant claimed selective activation of different first and second nozzle does not preclude simultaneous use of first and second nozzles at one flow rate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE4138468 as applied to claim 9 above, and further in view of WO03028943A1. Note, an English equivalent to WO03028943A1 is US20030062126A1 to Scaggs.

The angle of the nozzles is a feature which can be configured according to intended use. WO03028943A1 shows an angle of about 50 degrees. DE4138468 shows an angle of about 80 degrees. The use of varying angles would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the different work pieces are better treated with different impingement angles.

Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE4138468 in view of US20040197433A1 to Terada et al. Terada et al describe [0169-0170] emitting water from a first nozzle at a flow velocity and emitting water from a

second nozzle at a flow velocity slower than the velocity from the first nozzle. The use of selective nozzle usage would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the different flows assist in effecting feature shaping. Note, change in size of an apparatus does not impart patentability to the claims and the change in size would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because laser treatment is well known to be applied to both large and small articles.

(10) Response to Argument

Applicant's arguments filed October 12, 2007 have been considered, but they are not persuasive.

Applicant argues that DE 4138468 does not teach or suggest "the first nozzle and at least the second different nozzle are selectively activated based upon the location of the laser interaction zone in the substrate". This argument is not convincing. This is an intended use which does not clearly define the apparatus beyond DE 4138468.

Applicant argues that WO03028943A1 "discloses the use of only one spray nozzle". This argument is not related to the reason WO03028943A1 was applied in the rejection. WO03028943A1 was used in the rejection because it shows the well known intended use of orienting a nozzle at about 50 degrees. Applicant's nozzle orientation would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the particular size, shape, material, or orientation of a chosen workpiece.

Applicant argues that Terada et al do not describe the nozzles "to be selectively activated based upon the location of the laser interaction zone". This argument is not convincing. This is an intended use which does not clearly define the apparatus beyond Terada et al.

Applicant argues that DE4138468 in view of Terada et al do not make obvious the recitation "wherein the controller is configured to shut-off the flow of liquid from the first nozzle to allow the at least a second nozzle to deliver liquid ". This argument is not convincing. Terada et al describe [0133] "a jet of the pure water is stopped". Applicant's automation limitation of a configured controller is an intended use which does not impart patentability to the apparatus claims.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Samuel M. Heinrich Samuel M. Heinrich

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